USSN: C-I-P of 09/714,332

Atty. Docket No.: 10236A

Prelim. Amdt. dated March 25, 2004

Amendments to the Claims:

The following listing of claims replaces all prior versions of claims in this Application:

Listing of Claims:

Claims 1 - 13 (Cancelled)

Claim 14 (New): A coextruded heat-sealable film structure, comprising:

(a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;

(b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;

(c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer; and

(d) wherein the heat-sealable film structure has a force over forming collar value of less than 20 pounds and a hot slip value of less than 20 at 290°C;

(e) wherein the core layer has a polymeric matrix selected from the group consisting of a ethylene propylene copolymer, propylene butylene copolymer, and a high density polyethylene; and

(f) wherein the core layer comprises a cavitating agent selected from the group consisting of polybutylene terephthalate, calcium carbonate, and blends thereof.

Claim 15 (New): A laminate film structure comprising a first film laminated to a second film, wherein the first film is a heat-sealable film structure comprising:

(a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;

Prelim. Amdt. dated March 25, 2004

(b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;

- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer;
- (d) wherein the heat-sealable film structure has a force over forming collar value of less 20 pounds and a hot slip value of less than 20 at 290°C; and
 - (e) wherein the second film is comprised of the same structure as the first film.

Claim 16 (New): A laminate film structure comprising a first film laminated to a second film, wherein the first film is a heat-sealable film structure comprising:

- (a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;
- (b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;
- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer;
- (d) wherein the heat-sealable film structure has a force over forming collar value of less 20 pounds and a hot slip value of less than 20 at 290°C; and
- (e) wherein the core layer has a polymeric matrix selected from the group consisting of a propylene homopolymer, a propylene copolymer, and a polyethylene.

Prelim. Amdt. dated March 25, 2004

Claim 17 (New): A laminate film structure comprising a first film laminated to a second film, wherein the first film is a heat-sealable film structure comprising:

- (a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;
- (b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;
- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer;
- (d) wherein the heat-sealable film structure has a force over forming collar value of less 20 pounds and a hot slip value of less than 20 at 290°C; and
- (e) wherein the antiblocking agent is a particulate antiblocking agent having an average particle size of from about 1 to about 5 μ m.

Claim 18 (New): A laminate film structure comprising a first film laminated to a second film, wherein the first film is a heat-sealable film structure comprising:

- (a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;
- (b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;
- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer;

Prelim. Amdt. dated March 25, 2004

(d) wherein the heat-sealable film structure has a force over forming collar value of less

20 pounds and a hot slip value of less than 20 at 290°C; and

(e) wherein the core layer has a polymeric matrix selected from the group consisting of

an ethylene propylene copolymer, propylene butylene copolymer, and a high density

polyethylene.

Claim 19 (New): The laminate film structure of claim 16 wherein the silicone gum has a

viscosity in the range of 10 to 20 million centistokes.

Claim 20 (New): The laminate film structure of claim 16 wherein the core layer further

comprises an additive selected from the group consisting of a natural hydrocarbon additive, a

synthetic hydrocarbon additive, a cavitating agent, an antistatic agent, and mixtures thereof.

Claim 21 (New): The laminate film structure of claim 16 wherein the functional layer further

comprises at least one antiblock additive.

Claim 22 (New): The laminate film structure of claim 16 wherein the surface of the functional

layer is flame treated or corona treated and the surface of the heat-sealable layer is untreated.

Claim 23 (New): The laminate film structure of claim 16 wherein the thermoplastic polymer of

the heat-sealable layer is selected from the group consisting of an ethylene-propylene random

copolymer, a propylene-butylene random copolymer, an ethylene-propylene-butylene

terpolymer, a linear low density polyethylene, a low density polyethylene, a metallocene-

catalyzed polyethylene, an ethylene vinyl acetate, an ethylene-methyl acrylate, an ionomer, and

blends thereof and the functional layer has a polymeric matrix selected from the group consisting

of a propylene polymer, an ethylene-propylene block copolymer, a high density polyethylene, an

ethylene vinyl alcohol copolymer, an ethylene-propylene random copolymer, a propylene-

butylene copolymer, an ethylene-propylene-butylene terpolymer, a medium density

Page 5 of 10

Prelim. Amdt. dated March 25, 2004

·

polyethylene, a linear low density polyethylene, an ethylene vinyl acetate, an ethylene-methyl

acrylate, and blends thereof.

Claim 24 (New): The laminate film structure of claim 18 wherein the thermoplastic polymer of

the heat-sealable layer is selected from the group consisting of a propylene-butylene random

copolymer, a metallocene catalyzed polyethylene, an ethylene vinyl acetate, and an ethylene-

methyl acrylate, an ionomer, and blends thereof.

Claim 25 (New): The laminate film structure of claim 24 wherein the functional layer comprises

a material selected from the group consisting of an ethylene vinyl alcohol copolymer, a

propylene-butylene copolymer, an ethylene vinyl acetate, an ethylene-methyl acrylate, and

blends thereof.

Claim 26 (New): The laminate film structure of claim 24 wherein the antiblocking agent is

selected from the group consisting of cross linked silicone resin powder, methyl methacrylate

resin powder, a spherical silica powder, and blends thereof.

Claim 27 (New): The laminate film structure of claim 18 wherein the core layer comprises a

cavitating agent selected from the group consisting of polybutylene terephthalate, calcium

carbonate, and blends thereof.

Claim 28 (New): The laminate film structure of claim 18 wherein the core layer is from about 5

to about 50 µm thick, the functional layer is from about 0.25 to about 3.0 µm thick, and the heat-

sealable layer is from about 0.5 to about 7 µm thick.

Claim 29 (New): The laminate film structure of claim 18 wherein the core layer is free of an

antistatic agent and a fatty acid amide slip additive.

Prelim. Amdt. dated March 25, 2004

Claim 30 (New): A coextruded heat-sealable film structure, comprising:

(a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;

- (b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;
- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer; and
- (d) wherein the heat-sealable film structure has a force over forming collar value of less than 20 pounds and a hot slip value of less than 20 at 290°C;
- (e) wherein the core layer has a polymeric matrix selected from the group consisting of a ethylene propylene copolymer, propylene butylene copolymer, and a high density polyethylene; and
- (f) wherein the heat-sealable layer is comprised of a material selected from the group consisting of ethylene vinyl acetate, ethylene-methyl acrylate, an ionomer, and blends thereof.

Claim 31 (New): A coextruded heat-sealable film structure, comprising:

- (a) a core layer comprising a thermoplastic polymer, the core layer having a first side and a second side;
- (b) a functional layer on the first side of the core layer, wherein the functional layer is selected from the group consisting of a laminating layer, a printable layer, a laminating and a printable layer, and a sealable layer;
- (c) a heat-sealable layer on the second side of the core layer comprising (i) a thermoplastic polymer and (ii) a slip system comprising a silicone gum having a viscosity greater than one million centistokes present in amount from about 0.2 wt. % to about 2.0 wt. % of the

Prelim. Amdt. dated March 25, 2004

heat-sealable layer and at least one antiblocking agent present in an amount from about 0.05 wt. % to about 0.5 wt. % of the heat-sealable layer; and

- (d) wherein the heat-sealable film structure has a force over forming collar value of less than 20 pounds and a hot slip value of less than 20 at 290°C;
- (e) wherein the core layer has a polymeric matrix selected from the group consisting of a ethylene propylene copolymer, propylene butylene copolymer, and a high density polyethylene; and
- (f) wherein the functional layer is comprised of a material selected from the group consisting of ethylene vinyl acetate, ethylene-methyl acrylate, ethylene vinyl alcohol copolymer, propylene-butylene copolymer, and blends thereof.

Claim 32 (New): The coextruded heat-sealable film structure of claim 31 wherein the heat-sealable layer is comprised of a material selected from the group consisting of ethylene vinyl acetate, ethylene-methyl acrylate, an ionomer, and blends thereof.